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- Address: Edward Grey Institute, Department of Zoology, South Parks Road, Oxford OX1 3PS, England.

The Cambridge collection of Fijian and Tongan landbirds

by Dick Watling

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In the Cambridge University Zoology Museum there is a little known collection of 140 skins of 42 species or subspecies of Fijian and Tongan landbirds, containing several very interesting skins. The collection has been undeservedly overlooked, probably because its existence has not been the subject of any published report. The majority of the skins were collected by Baron Anatole von Hügel, the renowned anthropologist, in 1875, material being obtained from most of the main islands. The other major contributor was L. Wigglesworth, who collected at the turn of the century. J. Lister collected most of the Tongan skins in 1889.

Von Hügel's most significant contribution was the skin of the Barred Rail *Nesoclopeus poecilopterus*, which he collected on Ovalau, a small island close to Viti Levu, although he did most of his ornithological work on the latter island. The species has not been positively recorded this century, although possibly re-sighted in 1973 (Holyoak, in prep.). The introduction of the Mongoose *Herpestes auro-punctatus* in 1883 has been responsible for the present demise of ground-living birds on the islands of Viti Levu and Vanua Levu where it is at present established. Von Hügel recorded on the label of *N. poecilopterus* 'scarce, very difficult to procure', indicating that it might already have been uncommon prior to the introduction of the mongoose; whereas Layard (1875) described it as '... generally distributed'. Von Hügel collected specimens of two other rails, but surprisingly not *Gallirallus philipensis sethsmithi*, which is the most widespread of the rails in Fiji today. In 1901, Wigglesworth procured no rails at all.

Von Hügel collected two specimens of *Vitia ruficapilla ruficapilla* from the island of Kadavu, which C. W. Benson considers are possibly type material. Another interesting specimen from Kadavu is the Fiji Shrikebill *Clytorhynchus vitiensis compressirostris*, an isolated form slightly larger than other subspecies. There is also a single specimen of the rarely collected form *C. v. heini* from Tongatapu, Tonga.

Both von Hügel and Wigglesworth collected several specimens of the Red-breasted Musk Parrot *Prosopiea tabuensis splendens* from several localities on Viti Levu, suggesting that it was then widespread and common there. This parrot was an aboriginal or early post-European introduction to Viti Levu from the island of Kadavu, where this form is endemic. Initially it

must have thrived in its new environment, despite competition from its closely related ecological counterpart, the Yellow-breasted Musk Parrot *Prosopiea personata*, which is confined to Viti Levu. However, *P. tabuensis* has since become rare on Viti Levu and is now confined to only a few localities on the forested windward side of the island. *P. personata*, the indigenous species, on the other hand remains common in all suitable habitats (pers. obs.). The nominate *P. t. tabuensis*, which is native to the island of Gau, was an aboriginal introduction to the islands of Eua and Tongatapu in the Tonga group, where the type specimen was collected by Captain Cook. It has managed to survive on the larger island of Eua, where there still remains suitable habitat, but it is extinct on Tongatapu, which is now devoid of natural vegetation. These introductions have provided an interesting experiment in the ecological separation of closely related species. On Viti Levu, where an ecological counterpart was present, *P. tabuensis* has not established itself successfully in the long term. This is apparently despite an initial period when it was possibly common. However on Eua in the absence of an ecological counterpart it has thrived.

The deliberate introduction of these two populations is also of interest. It is well known that until comparatively recently Pacific Islanders prized red feathers for ceremonial, prestigious or religious garments. This was especially so of Polynesians, but is also documented for some Melanesian Societies (Harrisson 1937). It is known, for instance, that Tongans and Samoans, who have no large bird species with red feathers, regularly sailed to Fiji to trade for those from *P. tabuensis* and also for the scarlet feathers of the Collared Lory *Phigys solitarius*. This trade stopped under the direction of Sir E. im Thurn, Governor of the Colony from 1904-11. It would seem probable that the Tongans, who were often the middlemen in the trade (Derrick 1951), deliberately introduced *P. tabuensis* to Eua and Tongatapu, to avoid or reduce trade with the Fijians, which was not always peaceful (Beaglehole 1965). Furthermore, the Tongans have been recorded as having transported live birds on occasions (Sclater 1876). It is unlikely that these weak flying parrots could have crossed the 800 kms to Tonga in the face of the Southeast Trades which blow for most of the year.

Neither von Hügel nor Wigglesworth collected any of the less common forest species such as the Blue-crested Broadbill *Myiagra azureocapilla*, the Black-faced Shrikebill *Clytorhynchus nigrogularis*, the Pink-billed Parrotfinch *Erythrura kleinschmidti* or the Red-throated Lorikeet *Charmosyna amabilis*. Von Hügel was primarily an anthropologist, but it is somewhat surprising that Wigglesworth did not procure any of them, although the first two are by no means uncommon.

TABLE 1

The Cambridge collection of Fijian and Tongan landbirds. In the right-hand column localities on the same island are separated by commas and immediately followed by the island name in brackets, and this is separated from localities on another island by a colon.

Fijian orthography for place names in Fiji is used throughout.

Species subspecies	Age and Sex				Localities collected
	♂♂	♀♀	Juv.	?	
<i>Demigretta sacra</i>		2		3	Navua R. (2), Rakiraki (1) (Viti Levu): Tongatapu (2)
<i>Butorides striatus diminutus</i>		1			Navua R. (1) (Viti Levu)
<i>Anas superciliosa pelewensis</i>	1	1			Tongatapu

Species/subspecies	Age and Sex				Localities collected
	♂♂	♀♀	Juv.	?	
<i>Accipiter rufitorques</i>	1	2	1		Rewa R. (1), Wainimala (1) (Viti Levu): Ovalau (1): One unknown
<i>Circus approximans approximans</i>				1	Navua R. (Viti Levu): Draiba (Ovalau)
<i>Nesocolopeus poecilopterus</i>	1				
<i>Porzana tabuensis tabuensis</i>	2				Nakorovatu (2) (Viti Levu)
<i>Poliolimnas cinereus tannensis</i>	1				Viti Levu
<i>Ptilinopus porphyraceus porphyraceus</i>	7	1		3	Makogai (1): Eua (2), Tongatapu (8)
<i>Ptilinopus perousii mariae</i>		1			Viti Levu
<i>Chrysoenas victor</i>	1			1	Taveuni
<i>Chrysoenas viridis</i>	1				Kadavu
<i>Chrysoenas luteovirens</i>	3	1		2	Nadrau (2), Wainimala (1), Viti Levu (1) (Viti Levu): Ovalau (1): Fiji Islands (1)
<i>Ducula latrans</i>	1	2			Rewa R. (1), Nagarawai (1) (Viti Levu): Ovalau (1)
<i>Columba vitiensis vitiensis</i>		1			Levuka (1) (Ovalau)
<i>Gallicolumba stairii</i>	1				Makogai
<i>Phigys solitarius</i>	3	3		1	Suva (2), Rewa R. (1), Nameka (1) (Viti Levu): Moturiki (1): 2 unknown
<i>Prosepeia personata</i>	2	3		1	Rewa R. (2), Navua R. (1), Nadarivatu (1), Viti Levu (2) (Viti Levu)
<i>Prosepeia tabuensis splendens</i>	2	1		3	Rewa R. (2), Namseka (1), Central Viti Levu (1) (Viti Levu): Fiji Islands (1): One unknown
<i>Prosepeia tabuensis tabuensis</i>	1	1			Eua (2)
<i>Cacomantis pyropbanus simus</i>		1			Suva (Viti Levu)
<i>Collocalia spodiopygia assimilis</i>				1	Rewa R. (Viti Levu)
<i>Halcyon chloris vitiensis</i>	3	2		1	Rewa R. (1), Suva (1), Nadarivatu (1) (Viti Levu): Ovalau (2): Makogai (1)
<i>Lalage maculosa pumila</i>			3	2	Suva (2), Rewa R. (3) (Viti Levu)
<i>Turdus poliocephalus layardi</i>				1	Fiji Islands
<i>Vitia ruficapilla ruficapilla</i>				2	Kadavu
<i>Rhipidura spilodera layardi</i>	1				Nadarivatu (Viti Levu)
<i>Mayornis lessoni lessoni</i>	3				Suva (2) (Viti Levu): Ovalau (1)
<i>Myiagra vanikorensis rufiventris</i>	3	3		1	Suva (4) (Viti Levu): Ovalau (3)
<i>Clytorhynchus vitiensis compressirostris</i>		1			Kadavu
<i>Clytorhynchus vitiensis vitiensis</i>	2			2	Rewa R. (1) (Viti Levu): Ovalau (1): Fiji Islands (2)
<i>Clytorhynchus vitiensis heinei</i>				1	Tongatapu
<i>Petroica multicolor pusilla</i>	3	1	1		Nadarivatu (3), Wainimala R. (1) (Viti Levu): Ovalau (1)
<i>Pachycephala pectoralis graeffii</i>	2			1	Nadarivatu (2), Wainimala R. (1) (Viti Levu)
<i>Artamus leucorhynchus mentalis</i>	1			2	Suva (1), Rewa R. (1), Wainimala R. (1) (Viti Levu)
<i>Aplonis tabuensis vitiensis</i>	4	2			Nimuka (1) (Viti Levu): Ovalau (5)
<i>Myzomela jugularis</i>	1	8		4	Suva (2), Nadarivatu (2) (Viti Levu): Levuka (9) (Ovalau)
<i>Foulebaio carunculata procerior</i>	5	1			Suva (2), Nadarivatu (1), Wainividrau (1), Viti Levu (1) (Viti Levu): Ovalau (1)
<i>Gymnomyza viridis brunneirostris</i>	1				Nadarivatu (Viti Levu)
<i>Zosterops explorator</i>				1	Rewa R. (Viti Levu)
<i>Zosterops lateralis flaviceps</i>	2	1			Rewa R. (2), Suva (1) (Viti Levu)
<i>Erythrura pealii</i>	1	1			Rewa R. (2) (Viti Levu)

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 Address: Box 9216, Nadi Airport P.O., Fiji.

A female specimen of *Gallicolumba jobiensis* from San Christoval, Solomon Islands

by D. T. Holyoak

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Gallicolumba jobiensis is widespread in New Guinea and the Bismarck Archipelago (Mayr 1941, Rand & Gilliard 1967). Females of these populations resemble males in the general pattern of coloration, although they are somewhat duller and darker (Goodwin 1967, Rand & Gilliard 1967). Goodwin mentions that he has seen a few specimens said to be females that were of typical male colour but he suspected that these might have been wrongly sexed by the collector.

Mayr (1935, 1936) described a specimen from Vella Lavella in the Solomon Islands as *Gallicolumba jobiensis chalconota*. The type is an adult male that differs from males of the nominate form in having a slightly heavier bill, less white on the lores and the purple on the upperparts less extensive. Besides the type (which is housed in the American Museum of Natural History) three other Solomon Islands specimens of *G. jobiensis* are known: two immature males from Guadalcanal collected by C. M. Woodford that are now housed in the British Museum (Natural History) and Merseyside County Museums, Liverpool (Tristram 1889: 269; Salvadori 1893: 599; Mayr 1936) and an adult female that was originally identified as *Phloganas johanna* Sclater (Tristram 1879) which is also in the Liverpool Collection.

The female specimen in Liverpool (Tristram Collection no. 9864) has been widely overlooked. It is labelled '♀ iris black, feet dark plum, beak black, food berries, seeds, etc., Makira Hr., Solomons, G.E.R.', indicating that it was collected by Lieut. G. E. Richards R.N. on San Christoval, as mentioned by Tristram (1879). This specimen is the only record of the species from San Christoval and the only known female of the species from the Solomon Islands. That it is correctly labelled as a female (and not a wrongly determined immature male) and that it is adult is suggested by the presence of a few moulting body feathers, by the condition of the dried bill and feet and the different coloration from that of the immature males in the B.M. (N.H.) and Liverpool. It closely resembles the three male specimens of *G. j. chalconota* in structure and size (wing 142, tail 89, exposed culmen 16, tarsus 26 mm). However, its coloration is entirely different from that of the adult male type specimen, resembling the two immature males in its generally drab appearance while differing from them in lacking rufous tips to the mantle feathers, scapulars and some wing-coverts and in having a strong green wash on the back, rump and scapulars: